

## REMARKS

This application has been reviewed in light of the Office Action dated May 24, 2004. Claims 1, 2, 4, 6, 8-10, 12, 13, 15, 17, 19-21, 34, and 45-49 are presented for examination, of which Claims 1, 9, 12, 20, 34, 45, 47, and 49 are in independent form. Claim 49 has been amended to change the term "a logic address" to read --an address--. Favorable reconsideration is requested.

A Claim To Priority and a certified copy of the priority document for this application were filed on May 2, 2000, as evidenced by a returned receipt postcard bearing the stamp of the Patent and Trademark Office, a copy of which is attached hereto. Applicant, again, respectfully requests acknowledgment of the claim for foreign priority and the receipt of the certified copy.

Claims 1, 5, 6, 8, 12, 17, 19, 34, 47, and 49 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner asserts that the term "predetermined value" is not described in the specification, and that the specification does not state that a "predetermined value" has a connection to "data length" or "TTL".

Applicant respectfully directs the Examiner to step S1003 in Figure 10 and step S1403 in Figure 1403, as well as the corresponding description at page 23, lines 5-9, and page 26, lines 7-21, as support for the term "predetermined value". Specifically, page 23, lines 5-9, states that step S1003 discriminates whether the "data length" 704 is equal to 507 bytes (a predetermined value) in step S1003. Similarly, page 26, lines 7-21, states that step S1403 discriminates whether "TTL" (Time To Live) 707 of the IP Header is equal to 207 (a predetermined value) or not. Applicant submits that the specification, as originally filed,

provides support for the term “predetermined value” and that the term “predetermined value” has a connection to terms “data length” and “TTL”, and respectfully requests the withdrawal of the rejection under Section 112, first paragraph.

Claims 1, 2, 4, 5, 12, 13, 15, 34, and 47-49 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,189,102 (*Beser*); Claims 45 and 46 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,266,726 (*Nixon et al.*); and Claims 6, 8-10, 17, and 19-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beser*, in view of U.S. Patent No. 5,850,388 (*Anderson et al.*).

Applicant respectfully traverses the rejections of Claims 1, 2, 4, 5, 6, 8-10, 12, 13, 15, 17, 19-21, 34, and 45-49 for the following reasons.

The aspect of the present invention set forth in Claim 1 is a network apparatus that includes a receiving unit adapted to receive data from a network by using a predetermined protocol, and a detecting unit adapted to detect a predetermined value in a packet header of the data received by the receiving unit, the packet header being provided for the predetermined protocol. The apparatus also includes a setting unit adapted to set a destination logic address of the received data as a logic address of the network apparatus in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same.

Among other notable features of Claim 1 is that the destination logic address of the received data is set as the logic address of the network apparatus in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination

physical address of the received data and a physical address of the network apparatus are the same. By virtue of this feature, it is possible to prevent the situation where the logic address of the network apparatus may be set unintentionally when the network apparatus receives one type of data for setting the logical address and another type of data for other purposes, and the logic address is set in response to the latter type of received data.

*Beser* relates to a method for authenticating network devices in a data-over-cable system. Figure 6 of *Beser* depicts a block diagram illustrating a Dynamic Host Configuration Protocol (DHCP) 66 message structure 108. The DHCP 66 message structure 108 includes, among other things, a client IP address field 124 (CIADDR), a your IP address field 126 (YIADDR), a server IP address field 128 (SIADDR), and a client hardware address field 132 (CHADDR). However, the DHCP 66 message structure does not indicate a destination address of the DHCP message. This is because the DHCP message is not transferred in accordance with the data in CIADDR, YIADDR, SIADDR, or CHADDR, and because the DHCP is located a layer higher than those of the Internet Control Message Protocol (ICMP) layer 56 and the Internet Protocol (IP) layer 54, as depicted in Figure 2.

The Office Action equates “BOOTP” of column 14, line 38, to column 16, line 35, as equating to the setting feature of Claim 1. Applications respectfully disagree with this understanding of the cited passage. The cited passage discusses the DHCP 66 message structure, and that the format of DHCP 66 messages is based on the format of BOOTstrap Protocol (“BOOTP”).

*Beser* states, at Table 5 (column 15, lines 45-65), that when a network host client broadcasts a DHCPDISCOVER message on its local physical subnet, DHCP servers may respond with a DHCPOFFER message that includes an available network address in the

YIADDR field, and that the DHCP servers unicast the DHCPOFFER message to the network host client, or may broadcast the message to a broadcast address on the client's subnet.

*Beser*, at column 18, lines 38-48, further states that in order to respond with the DHCPOFFER message to the network host client, the DHCP servers send the DHCPOFFER message to the address specified in the GIADDR field 130. Further, at column 19, lines 6-10, the CM 16 receives one or more DHCPOFFER messages from CMTS 12 on a downstream connection.

From the above cited passages, Applicant understands that the YIADDR of a DHCPOFFER message is an IP address that will be set in the CM, but is not an address designated as a destination address of the DHCPOFFER message. However, nothing has been found in *Beser* that would teach or suggest setting the destination logic address of the received data as the logic address of the network apparatus in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same, as recited in Claim 1.

Accordingly, Applicant submits that Claim 1 is not anticipated by *Beser*, and respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(e).

Independent Claims 12 and 34 are method and network device control program claims, respectively, corresponding to apparatus Claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with Claim 1. Additionally, independent Claims 47 and 49 include a feature substantially similar as that discussed above above in connection with Claim 1. Accordingly, Claims 47 and 49 are

believed to be patentable for reasons substantially similar as those discussed above in connection with Claim 1.

The aspect of the present invention set forth in Claim 9 is a network apparatus. The apparatus includes a receiving unit adapted for receiving an ICMP echo message, a data length detecting unit adapted for detecting a data length in a packet header of the ICMP echo message received by the receiving unit, and a setting unit adapted for setting a destination IP address of the received ICMP echo message as an IP address of the network apparatus if (a) the data length has a specific value and (b) a destination MAC address of the received ICMP echo message and a MAC address of the apparatus are the same.

Among other important features of Claim 9 is the network apparatus setting a destination IP address of the received ICMP echo message as an IP address of the network apparatus if (a) the data length has a specific value and (b) a destination MAC address of the received ICMP echo message and a MAC address of the apparatus are the same.

As discussed above, in connection with Claim 1, the *Beser* method does not set the destination logic address of the received data as the logic address of the network apparatus in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same. For reasons substantially similar to those discussed above in connection with Claim 1, nothing has been found in *Beser* that would teach or suggest setting a destination IP address of the received ICMP echo message as an IP address of the network apparatus if the data length has a specific value and a destination MAC address of the received ICMP echo message and a MAC address of the apparatus are the same, as recited in Claim 9.

Accordingly, Applicant submits that Claim 9 is clearly allowable over *Beser*, taken alone.

*Anderson et al.* relates to protocol analyzers for monitoring and analyzing digital transmission networks. *Anderson et al.* is cited for allegedly teaching that the received data is an ICMP echo message by an ICMP protocol and the special attribute is a data length of the ICMP echo message. However, nothing has been found in *Anderson et al.* that would teach or suggest setting a destination IP address of the received ICMP echo message as an IP address of the network apparatus if (a) the data length has a specific value and (b) a destination MAC address of the received ICMP echo message and a MAC address of the apparatus are the same, as recited in Claim 9.

Therefore, even if *Beser* and *Anderson et al.* were to be combined in the manner proposed in the Office Action, assuming such combination would even be permissible or proper, the resulting combination also would fail to teach or suggest at least those features of Claim 9.

Accordingly, Applicant submits that Claim 9 is patentable over *Beser* and *Anderson et al.*, whether considered separately or in any proper combination.

Independent Claim 20 is a method claim corresponding to apparatus Claim 9, and is believed to be patentable for at least the same reasons as discussed above in connection with Claim 9.

The aspect of the present invention set forth in independent Claim 45 is a network apparatus that includes a receiving unit adapted to receive data from a network by using a predetermined protocol, a detecting unit adapted to detect a predetermined value in a packet header of the data received by the receiving unit, the packet header being provided for

the predetermined protocol, and a setting unit adapted to set a factory-based value in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same.

Among other important features of Claim 45 is the network apparatus setting a factory-based value in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same. By virtue of this feature, it is possible to prevent the situation where the factory-based value may be set unintentionally when a network apparatus receives one type of data for setting the factory-based value and another type of data for other purposes, and the factory-based value is set in response to the latter type of received data.

*Nixon et al.* relates to a process control system for controlling a plurality of devices of multiple different types using a standard control protocol. The Office Action cites column 26, line 24, to column 27, line 18, as disclosing the setting feature of Claim 45. Applicant respectfully disagrees. The cited passage merely describes a method for bootstrap loading a control system throughout a network in a process control environment. However, nothing has been found in *Nixon et al.* that would teach or suggest a network apparatus setting a factory-based value in a case where (a) the predetermined value is detected by the detecting unit and (b) a destination physical address of the received data and a physical address of the network apparatus are the same, as recited in Claim 45.

Accordingly, Applicant submits that Claim 45 is clearly allowable over *Nixon et al.*

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

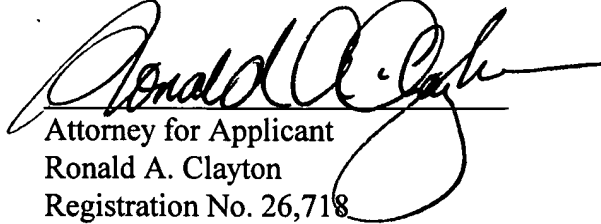
This Amendment After Final Action is believed clearly to place this application in condition for allowance and, therefore, its entry is believed proper under 37 C.F.R. § 1.116. Accordingly, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.



Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
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